

Land South of South Side, Steeple Aston, Oxfordshire

Construction Environmental Management Plan (Biodiversity)

June 2021

on behalf of Rectory Homes Ltd

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Client	Rectory Homes Ltd
Job name	Land south of South Side, Steeple Aston, Oxfordshire
Report date	3 rd June 2021
Report title	Construction Environmental Management Plan (Biodiversity)
Reference	W4256_rep_Land South of South Side, Steeple Aston CEMP_06-06-21

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1 Introduction

This Construction and Environmental Management Plan (CEMP): Biodiversity has been prepared by Windrush Ecology Ltd on behalf of Rectory Homes in respect of the development of the Land south of South Side, Steeple Aston (referred to as the 'site' for the purposes of this report).

A planning application for the erection of 10 dwellings with access off South Side including a new pedestrian footway, parking and garaging, landscaping and all enabling and ancillary works was submitted to Cherwell District Council in December 2019.

This CEMP has been prepared to support the discharge of a pre-commencement ecology condition which states that:

'Notwithstanding the information submitted, no development shall take place (including demolition, ground works, vegetation clearance) until a Construction Environmental Management Plan (CEMP: Biodiversity) has been submitted to and approved in writing by the Local Planning Authority. The CEMP: Biodiversity shall include as a minimum:

- a) Risk assessment of potentially damaging construction activities;
- b) Identification of 'Biodiversity Protection Zones';
- c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements);
- d) The location and timing of sensitive works to avoid harm to biodiversity features;
- e) The times during construction when specialist ecologists need to be present on site to oversee works:
- f) Responsible persons and lines of communication;
- g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person;
- h) Use of protective fences, exclusion barriers and warning signs.'

The CEMP prescribes detailed mitigation strategies required to avoid or minimise impacts on important and/or protected ecological features and species during the construction phase. This document is underpinned by the findings of an Ecological Assessment, including further survey work, undertaken by Southern Ecological Solutions during 2019 (Southern Ecological Solutions, 2019).

The CEMP includes details regarding identification of biodiversity protection zones, timing of works, sensitive working methods, requirements for ecological supervision.

It will be the responsibility of Rectory Homes Ltd as the landowner and developer to ensure the appointed contractor reviews the CEMP to ensure that appropriate mitigation is implemented during construction.

The remainder of the CEMP is set out as follows:

- Section 2 describes the site context and a summary of ecological features present within the site;
- Section 3 sets out the risk assessment of potentially damaging construction activities considering the ecological features and protected species identified in Section 2;
- Section 4 details the mitigation strategies required considering the risks identified in Section 3; the roles and responsibilities to ensure adequate and appropriate implementation of the CEMP including responsible persons, lines of communication, and appointment of an Ecological Clerk of Works (ECoW).
- Section 5 details the mitigation strategies to be implemented to minimise the identified risks.

2 Site Context & Summary of Ecological Features

2.1 Site Location and Context

The Land South of South Side (referred to as 'the site' for the purposes of this report) is located on the south-western edge of the village Steeple Aston in Oxfordshire. South Side is the southmost of two primary roads which bisect the village on an east-west axis, joining with the Oxford Road (A4260) to the west. The Ordnance Survey grid reference for the centre of the site is SP 4697 2583.

The site covers a roughly 1 hectare area of land that comprises an area of semi-improved grassland with scattered young scrub and pockets of tall ruderal vegetation. On two earth mounds positioned centrally within the site are areas of established scattered scrub and further tall ruderal vegetation. In the north-west is an area of hard-standing with ephemeral vegetation and a dilapidated single-storey building. The site is bound by hedgerows to the north, east and west (with the latter running along the far side of a steel fence. A further hedgerow runs roughly parallel with the southern site boundary, between 1m and 9m to the south.

South Side borders the site to the north, beyond which is residential development and to the north-west, agricultural land. Further residential properties extend along South Side to the east, while there is a commercial property to the immediate west. Arable farmland is present to beyond the hedgerow to the south. The wider landscape beyond the confines of the village is agricultural in nature comprising a patchwork of arable and improved grassland fields, set within a network of hedgerows and interspersed with occasional areas of woodland.

The majority of habitats within the site are considered to be of ecological value at the site level, with boundary hedgerows considered to be of moderate ecological value, being of importance at the local level.

2.2 Summary of Ecological Features & Protected Species

A full ecological assessment of the site, informed by detailed ecological surveys including an Extended Phase 1 habitat survey, reptile survey and bat surveys (ground level tree assessment; emergence/re-entry survey of building), was undertaken during 2019 (Southern Ecological Solutions, 2019).

A walkover was undertaken on the 16th April 2021 by Robbie Birkett of Windrush Ecology Ltd. Habitats were noted to be in a comparable condition to that recorded during the 2019 surveys, with some modest expansion of tall ruderal, ephemeral and scattered scrub habitats. Changes noted are not considered to represent a significant change to the ecological status of the site.

A detailed badger *Meles meles* survey, involving a walkover of the site to look for badger setts, and evidence of badger activity such as digging, foraging, footprints, hair, dung pits and latrines was also undertaken on the 16th April 2021 by Mr Birkett. No badger setts or evidence of badger activity were observed. European rabbit *Oryctolagus cuniculus* warrens were noted to be present within the two earth mounds located centrally.

The existing ecological features within the site are shown on the Phase 1 habitat plan which can be found in Appendix 2.

2.2.1 Statutory Sites of Nature Conservation Importance

There are no internationally designated sites within a 5 km radius of the site. There are four nationally designated sites within a 5km radius. These include three Sites of Special Scientific Interest (SSSI), namely Horsehay Quarries SSSI, Middle Barton Fen SSSI and Bestmoor SSSI, and Crecy Hill Local Nature Reserve.

Impacts on statutory sites of nature conservation importance during both the construction and operational phase of development are predicted to be negligible.

2.2.2 Non-Statutory Sites of Conservation Importance

There are two non-statutory designated sites within 2km. This includes the Glyme and Dorn Valleys Conservation Target Area (CTA) and Upper Cherwell Valley CTA. Development is predicted to have no significant impacts on these non-statutory designated sites due to their distance from the site boundary.

2.2.3 Habitats & Species

Detailed information on habitats and species present within the site can be viewed within the original Ecological Assessment (Southern Ecological Solutions, 2019). The site supports the following habitats:

- · Semi-improved grassland;
- Scattered scrub:
- Tall ruderal vegetation;
- Hard-standing with ephemeral vegetation; and
- Hedgerows

Protected & notable species that are considered to be of relevant to the site are:

- Badger (no setts present and no evidence of activity, but site offers suitable foraging habitat);
- Reptiles (full reptile survey in 2019 identified no reptiles possibility for transitory individuals to use the site opportunistically);
- Foraging bats
- Nesting birds
- European hedgehog (suitable foraging and sheltering habitat); and
- Common toad (suitable foraging and sheltering habitat).

Great crested newts and roosting bats are considered to be absent from the site.

Semi-improved grassland, scattered scrub and hedgerows offer suitable habitat for invertebrates, however given the limited size of the site and the relative abundance of these habitats within the local area, it is considered unlikely that the site supports any assemblages of rare/noted invertebrates significant at a local level.

2.2.4 Summary of Ecological Features

Ecological features relevant to the CEMP are summarised in Table 1 below.

Table 1. Existing ecological features and level of importance based on baseline ecological survey information.

Feature	Ecological Value	Legal Protection
Semi-improved grassland	Site	None
Scattered scrub	Site	None
Tall ruderal vegetation	Site	None
Hard-standing with ephemeral vegetation	Site	None
Hedgerows – northern, southern and western	Local	Natural Environment Rural Communities (NERC) Act 2006 – Habitats of Principal Importance.
		Hedgerow Regulations 1997 – Important Hedgerows

Hedgerows – eastern	Site	None – Insufficient length to meet criteria for 'Hedgerows' under NERC Act 2006		
Badgers	Site	Protection of Badgers Act 1992		
Reptiles	Site	Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). The common and widespread species of reptile receive partial protection, with part of sub-section 9(1) and all of sub-section 9(5) applying NERC Act 2006		
Bats - Foraging	Site	Conservation of Habitats and Species Regulations 2017 Wildlife & Countryside Act 1981 (as amended) NERC Act 2006		
Birds - Nesting	Site	Wildlife & Countryside Act 1981 (as amended) NERC Act 2006		
European Hedgehog	Site	NERC Act 2006		
Common Toad	Site	NERC Act 2006		
European Rabbit	N/A – non-native species	Animal Welfare Act 2006 (Protection against unnecessary suffering)		

3 Risk Assessment

The risk assessment of potentially damaging construction activities in relation to ecological features (including protected species) and the associated legislation contained in Table 1 above, is set out in Table 2 below. Requirements for mitigation and the locations within the site where the risk is relevant are also identified.

Table 2. Risk of potentially damaging activities.

Ecological Features	Impact Assessment	Risk Assessment (in the absence of mitigation measures)	Location where the risk is relevant
Semi-improved grassland	Direct impacts certain: loss of habitat to facilitate development. The grassland does not meet the criteria for priority grassland habitats, such as Lowland Meadow, under Section 41 of the NERC Act 2006. No protected plant species present within the habitat. The negative impacts resulting from the loss of an area of semi-improved grassland, under the footprint of the development, are not considered significant within the local context. Loss will have a negative effect at the site level only.	Impact certain but not significant No mitigation required during construction phase	Majority of site footprint
Scattered Scrub	Direct impacts certain: loss of habitat to facilitate development. No protected plant species noted within the habitat.	Impact certain but not significant No mitigation required during construction phase	Patches of established scattered scrub on central earth mounds and in north- west and south-east corners Scattered young tree growth within semi- improved grassland
Tall Ruderal	Direct impacts certain: loss of habitat to facilitate development. No protected plant species noted within the habitat.	Impact certain but not significant No mitigation required during construction phase	Pockets of tall ruderal vegetation throughout the site.
Hard-standing with ephemeral vegetation	Direct impacts certain: loss of habitat to facilitate development. No protected plant species noted within the habitat.	Impact certain but not significant No mitigation required during construction phase	Area in north-west

Ecological Features	Impact Assessment	Risk Assessment (in the absence of mitigation measures)	Location where the risk is relevant
Hedgerows	Direct impacts certain: loss of short sections of hedgerow on northern boundary to accommodate visibility splay for new access road and new footpath. Reduction in width where encroaching shrubs are spreading into interior and replacement of component shrubs where no longer viable in long term.	Impacts certain but not significant	Hedgerows present along the northern, eastern and western boundaries
	Proposed new native hedgerow planting along eastern boundary and strengthening of northern and western hedgerows with supplementary native hedgerow planting. Total hedgerow length to be increased. The adverse impact resulting from the loss of hedgerow habitat not considered significant given proposed retention of majority of existing hedgerow length and proposed new planting.		Northern hedgerow includes a number of standard trees, some of which lie beyond but adjacent to the site
	Potential for damage to retained habitat, including standard trees, through vehicle movements and material storage. Potential for damage to retained habitat, including standard trees, through groundworks.	Impact possible in the absence of mitigation	Hedgerow present immediately beyond southern site boundary
	Potential damage to habitat through improper management.		
Badgers	Direct impacts possible: no badger setts or evidence of badger activity observed during survey in April 2021, however potential for individuals to frequent the site for foraging.	Impacts possible in the absence of mitigation	Whole site
Reptiles	Direct impacts possible: reptiles concluded to be absent following full reptile survey in 2019, however possibility for transitory individuals to use suitable habitat for shelter and brumation.	Impacts possible in the absence of mitigation	Whole site
Bats - Foraging	Indirect impacts possible: possible damage to commuting habitat (trees and hedgerows) without mitigation.	Impacts possible in the absence of mitigation	Site boundaries
Birds - Nesting	Direct impacts possible: removal of trees, shrubs and other woody vegetation during the bird breeding period may result in the damage or destruction of active birds' nests, and has the potential to result in the killing or injury of eggs and young.	Impacts possible in the absence of mitigation	Within scattered scrub, hedgerows and trees
European Hedgehog	Direct impacts possible: risk of death or disturbance to sheltering or hibernating individuals.	Impacts possible in the absence of mitigation	Within scattered scrub and hedgerows

Ecological Features	Impact Assessment	Risk Assessment (in the absence of mitigation measures)	Location where the risk is relevant
Common Toad	Direct impacts possible: risk of death or disturbance to sheltering or brumating individuals.	Impacts possible in the absence of mitigation	Whole site
European rabbit	Direct impacts likely: risk of unnecessary suffering during clearance of two earth mounds containing rabbit warrens.	Impacts possible in the absence of avoidance measures	Two central earth mounds

4 Roles & Responsibilities

4.1 Responsible Persons

The landowner and developer (Rectory Homes Ltd) and their appointed contractor are responsible for the implementation of this CEMP. On site responsibility will be held by contractor's site manager or a suitable delegate within the contractor's company to ensure that all personnel are aware and adhere to this CEMP.

All personnel working on site will be made aware through site inductions and tool-box talks on the potential for protected species to be present on site, of relevant protection measures and the procedure for alerting the Ecological Clerk of Works (ECoW) if any species are discovered on site.

4.2 Ecological Clerk of Works (ECoW)

An ECoW will be appointed by the client as required to liaise with the contractor.

The ECoW's responsibilities will be to:

- Provide on-going guidance for the site team in dealing with ecological matters and interpreting the CEMP. Commencing with a tool-box talk to inform all site contractors of the ecological constraints and protection measures detailed in the CEMP and the appendices;
- Provide on-site supervision of works that require it, as in Section 5 of this report; and
- Develop any additional method statements and or/site protocols as required.

A copy of the CEMP will be kept on site and will therefore be available for the ECoW and the contractor's site manager at all times.

4.3 Lines of Communication

The site manager or foreman for the appointed contractor and the ECoW will communicate directly over implementation of the mitigation measures and any issues or complications that arise during the works to develop the site.

In the unlikely event that any protected or species of principal importance are encountered unexpectantly during the works, including roosting bats, great crested newts *Triturus cristatus*, nesting birds or hazel dormouse *Muscardinus avellanarius*, works should stop immediately and the ECoW should be contacted immediately to provide advice on how best to proceed.

5 Mitigation

Mitigation strategies to minimise the risks identified in Section 3 above, are set out in Table 3 below and where relevant appended to this CEMP. Table 3 identifies the practical measures to be employed, the location and timing of sensitive works, requirements for the ECoW and the use of protective fences, exclusion barriers and warning signs for those effects identified in Table 2 above.

Table 3. Mitigation strategy. Please refer to Appendix 4 for a plan to show retained habitats and Biodiversity Protection Zones.

Ecological feature identified as at risk	Purpose of mitigation measures	Mitigation measures to be implemented/ECoW requirements	Timing of works	Location	Responsibility
Hedgerows	To protect retained hedgerows Short sections of the northern boundary hedgerow will be cleared to accommodate the new access road visibility splay and footpath Some areas of hedgerow will be reduced in width where hedgerow shrubs have encroached into the site	Retained hedgerows will be fenced within the Biodiversity Protection Zones (Appendix 4), and protected in accordance with British Standard 5837:2012, with the establishment of appropriate root protection areas. In the long-term, retained areas will be managed and enhanced with supplementary hedgerow planting. Prior to the installation of the protective fencing, the hedgerows will be managed to ensure safe working and to facilitate the erection of the protective fencing. Protective fencing will be installed to provide a physical and visual barrier. This fencing will also encircle those semi-mature trees adjacent to the northern hedgerow that are to be retained (see Appendix 3 for a plan). This will create an overall 'biodiversity protection zone' for all retained habitats. The fencing will have all weather notices attached, marked as 'Construction Exclusion Zone – KEEP OUT'. No materials will be stored within the 'Construction Exclusion Zone' areas and no activity is to take place within these areas. If any roots over 25mm diameter are found outside the root protection area an arboriculturist should be contacted for advice.	Protective fencing will be put in place prior to the commencement of construction works. The fencing will remain in place throughout the construction period.	Northern, eastern, southern and western hedgerows	Contractor
Badger	To protect badgers	A detailed badger survey in April 2019 identified no badger setts within the site.	Precautionary measures for badger	Whole site	Contractor

		The site does however offer some suitable habitat for sett creation. In the unlikely event that a novel sett is dug within the site in the lead up to or during the construction phase then works in the vicinity will immediately halt and advice be immediately sort from the ECoW as to how to proceed.	to be implemented throughout construction phase.		ECoW will contacted in the eve of finding a bade sett	
		Trenches and pits left open overnight will be provided with a means of escape (plank of wood leaned at maximum 45° angle) and inspected each morning to check for trapped badgers or other mammals.				
		Should a trapped badger be encountered the ECoW will be contacted immediately.				
		Any temporarily exposed open pipes (>120mm outside diameter) will be blanked off at the end of each working day so as to prevent badger/other mammals gaining access as may happen when contractors are off-site.				
		Chemicals will be stored overnight in a sealed compound or secure containers.				
		Large mounds of spoil or loose topsoil will be avoided and fenced off where necessary to avoid adoption of such features by badgers.				
		The above also applies to hedgehogs and other mammals.				
Reptiles	To avoid the killing and injury of individual reptiles during site preparation and construction works.	Prior to the commencement of site clearance, the ECoW will give a 'tool-box talk' to ensure all site operatives are aware of the possibility of encountering reptiles. The talk will include reptile identification, what to do if reptiles are found, the legislative protection they receive and the specific on-site reasonable avoidance	Habitat manipulation/clearance will be undertaken during the reptile active season (April to October inclusive). ECoW will attend site to provide 'tool-box'	Whole site	Contractor w ECoW	vith

	measures. The tool-box talk will highlight those areas of where reptiles might shelter. The site will be cleared in a careful and sensitive manner with site operatives maintaining vigilance for reptiles throughout. The ECoW will undertake fingertip searches of suitable vegetation for reptiles, where deemed necessary, immediately prior to clearance. Vegetation will be cleared during suitable weather conditions between April and October, when reptiles are active and most able to escape under their own power. Clearance will occur only during daylight hours. Initial Habitat manipulation Areas semi-improved grassland, scattered scrub and tall ruderal vegetation, along with relevant areas of hedgerow will be cleared in two phases. Vegetation will be subject to an initial cut to no less than 15cm above ground level and left undisturbed for at least 24 hours, allowing time for any resident reptile to vacate the area. This will be followed by a second cut to ground level. The direction of working will be from north to south to encourage any resident reptiles to disperse south and south-west, into retained offsite habitats. Any existing piles of brash/logs will be deconstructed by hand, with resulting refuse	talk and undertake fingertip searches of relevant habitat areas.			
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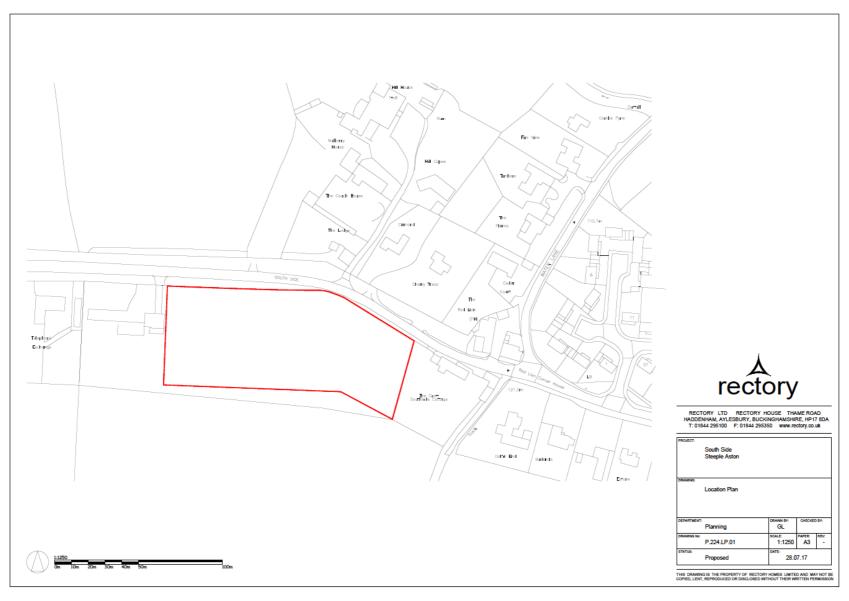
		All arisings/brash resulting from vegetation clearance will be removed from the site immediately with no piles of brash created.			
		Ongoing Management			
		Following initial clearance, vegetation within the development footprint will be maintained near to ground level throughout the construction phase.			
Bats	To protect foraging bats and their commuting routes	Retained bat foraging and commuting habitat will be protected through habitat protection measures relating to hedgerows, outlined above. Artificial lighting of the site during the construction phase will be kept to a minimum. All lighting will be switched off outside of working hours.	Retained commuting and foraging habitat to be protected throughout construction phase	Hedgerows and trees, including hedgerow to immediate south of site	Contractor
		Lighting of the Biodiversity Protection Zones from stationary lighting units will be strictly avoided.			
Birds	To avoid the damage or destruction of active birds' nests, and killing or injury of eggs and young.	Removal of all woody vegetation will be undertaken between September and February to avoid the bird breeding season (March – August, inclusive). OR	Removal of individual trees and shrubs from the site September to February, inclusive. OR	Whole site	Contractor ECoW to undertake Breeding Bird Check if necessary
		If vegetation clearance is required between March and August, the ECoW will be required to assess if there are any risks to breeding birds to ensure compliance with the legal protection afforded to nesting birds under the Wildlife and Countryside Act 1981 (as amended). This is likely to require a survey for nesting birds by the ecologist immediately prior to the vegetation clearance (usually	If undertaken during March to August a Breeding Bird Check will be required, prior to removal of the trees and shrubs.		ii noocaary

		recommended within 24 hours). If nesting birds were present within the trees and shrubs that require removal, work would need to be delayed in the vicinity of the nest to avoid disturbance until the young have fledged.				
European Hedgehog & Common Toad	To avoid killing and injury of hedgehogs and common toads	Mitigation measures set out for badgers and reptiles above will also provide protection for hedgehogs and common toads ECoW will undertake hand search of suitable habitat for hedgehog nests prior to two-stage vegetation clearance.	Clearance of suitable vegetation outside of hedgehog hibernation period (November to March)	Whole site	Contractor w ECoW	vith
European Rabbit	To avoid unnecessary suffering of rabbits.	Rabbits inhabiting warrens within two central earth mounds will be humanely removed prior to the commencement of works to clear these features.	Prior to works to remove earth mounds	Two central earth mounds	Contractor	

6 References

Southern Ecological Solutions (SES), 2019 Ecological Assessment - Steeple Aston.

7 Appendix 1. Site Location Plan



8 Appendix 2. Phase 1 Habitat Plan

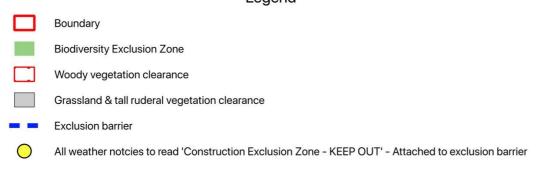


9 Appendix 3. Proposal Plan



10 Appendix 4. Ecological Mitigation Plan







Project: Land South of South Side, Steeple Aston Ref: W4256 Date: 02/06/21